

From: [Granger, Michelle](#)
To: [Cummings, James](#)
Subject: FW: Addendum No. 1, Draft RAWP, OU3 RA, PVGCS Site
Date: Monday, October 28, 2019 9:38:00 AM
Attachments: [20191024_Cover Letter RAWP Addndm No 1+RTC-FINAL.pdf](#)

Hi, Jim-

As we discussed...here it is attached. I'm hoping to start my review later today.

Best,
Michelle-

From: Bruce Scott Kennington <bkennington@ramboll.com>
Sent: Thursday, October 24, 2019 9:21 PM
To: Granger, Michelle <Granger.Michelle@epa.gov>
Cc: Hauber, Erin M CIV USARMY CENWK (US) <Erin.M.Hauber@usace.army.mil>; Bradley J. Brink (Bradley.J.Brink@usace.army.mil) <Bradley.J.Brink@usace.army.mil>; Mumford, Fred <Fred.Mumford@dep.nj.gov>; Stonestreet, Wendy E CIV USARMY CENWK (USA <Wendy.E.Stonestreet@usace.army.mil>; rich.e.gajdek@usace.army.mil; patrick nejand <patrick.c.nejand@usace.army.mil>; Neal F. Kolb P.E. (Neal.F.Kolb@usace.army.mil) <Neal.F.Kolb@usace.army.mil>; Hidalgo, Luis (G&I) <Luis.Hidalgo@riotinto.com>; Gorm Heron (GHeron@thermalrs.com) <GHeron@thermalrs.com>; Chris Thomas (cthomas@thermalrs.com) <cthomas@thermalrs.com>; Scott Tarmann <starmann@ramboll.com>; Zizila, Frances <Zizila.Frances@epa.gov>
Subject: Addendum No. 1, Draft RAWP, OU3 RA, PVGCS Site

Dear Michelle:

On behalf of Pechiney Plastics Packaging, Inc. (PPPI), the Primary Settling Defendant for the Remedial Design/Remedial Action Consent Decree (CD)¹, and Luis Hidalgo (Project Coordinator for OU3), please see the attached cover letter and transmittal of Addendum No. 1 to the Draft Remedial Action Work Plan for Operable Unit (OU)3 at the Pohatcong Valley Groundwater Contamination Superfund (PVGCS) Site. Also included in the attached are responses to additional requested clarifications received from the Agency via e-mail dated October 17, 2019.

We look forward to addressing what additional questions as they may arise and transmittal of Addendum No. 2 to the Agency (containing updated drawings for the surface treatment system components and a revised Operations, Maintenance and Monitoring Plan) at the earliest opportunity. Please do not hesitate to contact me with any questions or if you would like to schedule a technical call with us including the technical experts at TRS Group.

¹ In the matter of United States of America v. PPPI (Civil Action No. 09-cv-05692) and United States of America v. Bristol Myers Squibb Company, et. al. (Civil Action No. 13-cv-05798) effective March 11, 2015.

Sincerely,

Bruce S Kennington
Principal

D +1 (312) 288-3834
M +1 (312) 953-9965
bkennington@ramboll.com

From: Granger, Michelle <Granger.Michelle@epa.gov>
Sent: Thursday, October 17, 2019 3:11 PM
To: Bruce Scott Kennington <bkennington@ramboll.com>
Cc: Hauber, Erin M CIV USARMY CENWK (USA) <Erin.M.Hauber@usace.army.mil>
Subject: RE: Pohatcong OU3 - RAWP Addendum and follow-up questions

Hi, Bruce-

Thank you for your responses to EPA's questions. We have reviewed the responses and need further clarification on a few. Please see the attached table. If you have any questions, feel free to reach out to me. Also, please incorporate your clarification/responses into the next submittal (Addendum #1). We look forward to reviewing it.

Thank you!
Michelle-

From: Bruce Scott Kennington <bkennington@ramboll.com>
Sent: Monday, October 14, 2019 6:10 PM
To: Granger, Michelle <Granger.Michelle@epa.gov>
Cc: Hauber, Erin M CIV USARMY CENWK (US) <Erin.M.Hauber@usace.army.mil>; Bradley J. Brink (<Bradley.J.Brink@usace.army.mil> <Bradley.J.Brink@usace.army.mil>); Stonestreet, Wendy E CIV USARMY CENWK (USA <Wendy.E.Stonestreet@usace.army.mil>); rich.e.gajdek@usace.army.mil; patrick nejand <patrick.c.nejand@usace.army.mil>; Neal F. Kolb P.E. (<Neal.F.Kolb@usace.army.mil> <Neal.F.Kolb@usace.army.mil>); Hidalgo, Luis (G&I) <Luis.Hidalgo@riotinto.com>); Gibson, Bradley (G&I <Bradley.Gibson@riotinto.com>); Gorm Heron (<GHeron@thermalrs.com> <GHeron@thermalrs.com>); Chris Blundy (<cblundy@thermalrs.com> <cblundy@thermalrs.com>); Chris Thomas (<cthomas@thermalrs.com> <cthomas@thermalrs.com>); Scott Tarmann (<starmann@ramboll.com> <starmann@ramboll.com>)
Subject: RE: Pohatcong OU3 - RAWP Addendum and follow-up questions

Dear Michelle:

On behalf of Pechiney Plastics Packaging, Inc. (PPPI), the Primary Settling Defendant for the Remedial Design/Remedial Action Consent Decree (CD)¹, and Luis Hidalgo (Project Coordinator for OU1(TCE)), please see the attached responses to questions orally conveyed in last week's Technical Call with USEPA and the representatives of the U.S. Army Corps of Engineers held on Oct 8, 2019, and also the follow-up questions from your below e-mail of Oct 9, 2019, regarding the proposed Addendum to the draft Remedial Action Work Plan for Operable Unit (OU)3 at the Pohatcong Valley Groundwater

Contamination Superfund (PVGCS) Site. Also attached is a proposed, revised draft RD/RA time schedule for OU3 reflecting the changes in drilling schedule and phased heating of the different groups of heaters for this Remedial Action.

We look forward to addressing what additional questions as they may arise and transmittal of Addendum No. 1 to the Agency at the earliest opportunity.

¹ In the matter of United States of America v. PPPI (Civil Action No. 09-cv-05692) and United States of America v. Bristol Myers Squibb Company, et. al. (Civil Action No. 13-cv-05798) effective March 11, 2015.

Sincerely,

Bruce S. Kennington

Principal

D +1 312 288 3834

M +1 312 953 9965

bkennington@ramboll.com

-----Original Message-----

From: Granger, Michelle <Granger.Michelle@epa.gov>

Sent: Wednesday, October 09, 2019 1:54 PM

To: Bruce Scott Kennington <bkennington@ramboll.com>

Subject: Pohatcong OU3 - RAWP Addendum and follow-up questions

Hi, Bruce-

Thank you for yesterdays call. Below are follow-up items and questions. Please keep in touch and let me know if you have any questions.

Best,

Michelle-

Follow-up Items from 10/8/19 call with Ramboll and Rio Tinto re: change in thermal vendor and impact to design approach.

- * Please keep USEPA informed of any interim informational submittals, conference calls and the schedule for submittal of the RAWP Addendum to ensure an expedited review.

- * Informational Requests: The FlexHeaterSM heating technology was recently patented by TRS Group. If available, please provide a project example demonstrating successful heating with this newly patented TCH technology.

Considerations for the RAWP Addendum:

· USEPA's primary concerns with the change in the heating and contaminant recovery strategy are:

o Removal of the previously proposed vapor recovery infrastructure co-located with each heater can and screened across the full length of thermal treatment zone and replacement with a passive venting system (i.e., a 2-inch, sand filled annulus around each heater can) which includes a short vapor extraction screen or chimney above the thermal treatment zone

o The level of effort associated with collecting soil confirmation samples

· The following RD appendices require updates:

- * Appendix B: Thermal Model Simulation Report (or Energy/Mass Balance equivalent)
- * Appendix D: Design Drawings
- * Appendix H: OM&M (including vendor safety plan and treatment system sampling)
- * The following RAWP appendices require updates:
 - * Appendix B: CQAP (some of the checklists)
 - * Appendix H: Contingency Plan – please include discussion of hazard analysis associated with drilling adjacent to active heating zone. Can drilling adjacent to an active heating zone, e.g., Group A, be performed as soon as practical in the drilling sequence to reduce the possibility of intercepting steam?
- * Wellfield layout changes (interim deliverable?):
 - * Will the treatment zone or the heated zone change from what was presented in the 100% RD?
 - * Will the spacing of the heaters change?
 - * Will the temperature of the heaters be monitored in situ?
- * Will there be any changes to the indoor air monitoring program?
- * Operational Duration:
 - * What is the estimated operational duration for the three stages, Groups A, B, and C?
 - * Has the amount of energy estimated to be required to reach treatment objectives changed?
 - * Is the estimated power input rate (W/m) associated with the FlexHeaterSM similar to the previous design?